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61/472,114 5 April 2011 (05.04.2011) US(71) Applicant (for all designated States except US): **SITE BLACK BOX LTD.** [IL/IL]; 6 Hanehoset Street, Ramat Hachayal, 69710 Tel-Aviv (IL).

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- with international search report (Art. 21(3))
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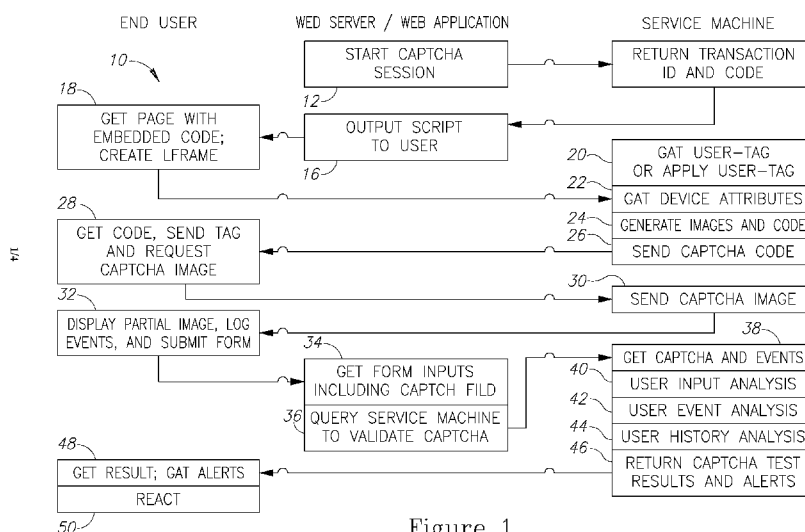
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8 November 2012(54) Title: **DISTINGUISH VALID USERS FROM BOTS, OCRs AND THIRD PARTY SOLVERS WHEN PRESENTING CAPTCHA**

Figure 1

(57) Abstract: Embodiments of the present invention relate to a method of providing an automated public Turing test to a client display system. The method includes providing an image having a plurality of random characters, as well as providing a browser code to the client, whereby the browser code is adapted to restrict display of the image to only a predetermined portion of the image. The method further includes detecting a client response to receiving the predetermined portion of said image.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB12/50551

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 11/00 (2012.01)

USPC - 726/22, 4

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8): G06F 7/04, 11/00, 21/00; H04L 29/06 (2012.01)

USPC: 726/4, 22, 27; 713/186

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); DialogPRO; IEEE; Google/Google Scholar; Turing test, CAPTCHA, image, characters, random, portion, detect, client, iFrame, cookies

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	US 2009/01113294 A1 (SANGHAVI M et al.) April 30, 2009, figure 1, paragraphs [0009], [0025], [0027], [0033]-[0036], [0044], [0045]	1, 3-5, 11 and 13-16 2, 6-10 and 12
Y	US 2009/0328163 A1 (PREECE S) December 31, 2009, paragraph [0006]	2 and 12
Y	EP 2383954 A2 (NOH S et al.) February 11, 2011, paragraphs [0024], [0025], [0030], [0031]	6 and 8-10
Y	WO 2010/143152 A2 (RAPAPORT S et al.) December 16, 2010, paragraph [0015]	7

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

“A” document defining the general state of the art which is not considered to be of particular relevance

“E” earlier application or patent but published on or after the international filing date

“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

“O” document referring to an oral disclosure, use, exhibition or other means

“P” document published prior to the international filing date but later than the priority date claimed

“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

“&” document member of the same patent family

Date of the actual completion of the international search

24 August 2012 (24.08.2012)

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB12/50551

-Continued from Box No. III: Observations where unity of invention is lacking-

The common technical feature shared by Groups I and II is providing an automated public Turing test to a client display system. However, this common feature is previously disclosed by US 8,056,129 B2 to Gusler et al. (hereinafter 'Gusler'). Gusler teaches providing an automated public Turing test (a completely automated Public Turing Test, abstract) to a client display system (a terminal device, abstract).

Since the common technical feature is previously disclosed by the Gusler reference, this common feature is not special and so Groups I and II lack unity.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB12/50551

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Group I: Claims 1-16; Group II: Claims 17-20

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fee must be paid.

Group I: Claims 1-16 are directed toward providing an automated public Turing test to a client display system including providing a browser code to the client and restricting display of an image.

Group II: Claims 17-20 are directed toward checking the existence of a user identifier, verifying the user identifier is a genuine identifier and obtaining and storing an analysis of the response of the user to the automated public Turing test.

Continued Within the Extra Page

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-16

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.